

U.S. National Stage Application of PCT/US99/08055 Docket No. 10551/147

a first end user adjustable amplifier that receives and amplifies the preferred audio signal to a level specified by the user;

a second end user adjustable amplifier that receives and amplifies the rémaining audio signal to a level specified by the user;

- [a)] a first soft clipping circuit receiving as an input the preferred audio signal, having an output coupled to the input of the first end user adjustable amplifier, and limiting an overall magnitude of the preferred audio signal when a level of the preferred audio signal exceeds a first predetermined value; and
- [b)] a second soft clipping circuit receiving as an input the remaining audio signal, having an output coupled to the input of the second end user adjustable amplifier, and limiting an overall magnitude of the remaining audio signal when a level of the remaining audio signal exceeds a second predetermined value, the combination of the first and second soft clipping circuits and first and second end user adjustable amplifiers thereby automatically maintaining a user selected ratio of the preferred audio signal to remaining audio signal, even in the presence of transient changes in either the preferred audio signal or the remaining audio signal.

Please add claims 53 and 54 as follows:

53. A method for optimizing playing of an audio program, the audio program including a preferred audio signal and a remaining audio signal output to end users, the end users including both hearing impaired and non-hearing impaired listeners, comprising:

amplifying the preferred audio signal to a level specified by the user; amplifying the remaining audio signal to a level specified by the user; computing a first ratio, the first ratio being a ratio of preferred audio signal level and the remaining audio signal level as specified by the user;

computing the transient amplitude of the preferred audio signal;

